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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/594,785

09/17/2007

Yingru Wu

76935/JPW/YC

7111

23432 7590 12/28/2009  
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EXAMINER

BAUM, STUART F

ART UNIT

PAPER NUMBER

1638

MAIL DATE

DELIVERY MODE

12/28/2009

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/594,785	<b>Applicant(s)</b> WU ET AL.	
	<b>Examiner</b> STUART F. BAUM	<b>Art Unit</b> 1638	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 17 September 2007.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 85-116 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_\_ is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) 85-116 are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

### *Election/Restrictions*

1. Restriction is required under 35 U.S.C. 121 and 372.

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

In accordance with 37 CFR 1.499, applicant is required, in reply to this action, to elect a single invention to which the claims must be restricted.

Group I, claim(s),85 (in part), 86-87, 90 drawn to a method of altering fiber initiation and/or elongation comprising manipulating a plant such that the production of a polypeptide is modified, wherein the polypeptide is a transcription factor, regulatory protein or a cell cycle protein, wherein the method comprises recombinantly expressing the polypeptide in said plant.

**If Applicants elect Group I, Applicants are also to elect one amino acid sequence from claim 86 and indicate if the polypeptide is a transcription factor, regulatory protein or cell cycle protein.**

Group II, claim(s),85 (in part), 88-89 drawn to a method of altering fiber initiation and/or elongation comprising manipulating a plant such that the production of a polypeptide is modified, wherein the polypeptide is a transcription factor, regulatory protein or a cell cycle protein, wherein the method comprises reducing the level of the polypeptide in said plant.

**If Applicants elect Group II, Applicants are to elect a specific antisense polynucleotide, a specific catalytic polynucleotide or a specific dsRNA molecule.**

Group III, claim 91-93, 103, 105, drawn to a method of assessing the potential of a fiber producing plant comprising analyzing the plant for a genetic variation in a polynucleotide.

Art Unit: 1638

**If Applicants elect Group III, Applicants are to elect one DNA sequence and one corresponding amino acid sequence.**

Group IV, claim 94, drawn to an isolated protein.

**If Applicants elect Group IV, Applicants are to elect one amino acid sequence.**

Group V, claim 95, 97, 99, 101, 107 and 109, drawn to an isolated and/or exogenous polynucleotide; vector, host cell, transgenic plant and transgenic seed comprising said polynucleotide.

**If Applicants elect Group V, Applicants are to elect one nucleotide sequence.**

Group VI, claim 96, 98, 100, 102, 108, 110, drawn to a polynucleotide which is catalytic polynucleotide capable of cleaving a polynucleotide or a double stranded RNA.

**If Applicants elect Group VI, Applicants are to elect one DNA sequence.**

Group VII, claim 104 and 106, drawn to a method of selecting from a breeding population a fiber producing plant.

Group VIII, claim 111, drawn to a method of identifying an agent which alters fiber initiation and/or elongation.

Group IX, claim 112-116, drawn to a transgenic fiber producing plant.

**If Applicants elect Group IX, Applicants are to elect one DNA sequence and one corresponding amino acid sequence.**

2. The inventions listed as Groups I-IX do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special

Art Unit: 1638

technical features for the following reasons: the method of altering fiber initiation and/or elongation in a fiber producing plant comprising manipulating said plant such that the production of a polypeptide is modified wherein the polypeptide is a transcription factor is taught in the prior art. Takatusuji et al (2001, US Patent 6,297,429 B1) teach a nucleic acid sequence that encodes a transcription factor transformed into a plant wherein the transcription factor is overexpressed and would inherently alter fiber initiation and/or elongation (claims 9-16).

3. In addition, the claims are not linked by a single technical feature because they are each drawn to products and processes not shared by the other. The method of overexpressing a protein of Group I is not shared by the method comprising reducing the level of a polypeptide of Group II which is not shared by the method of assessing the potential of a fiber producing plant of Group III which is not shared by the isolated protein of Group IV, which is not shared by the isolated polynucleotide of Group V, which is not shared by the polynucleotide which is catalytic polynucleotide capable of cleaving a polynucleotide or a double stranded RNA of Group VI, which is not shared by the method of selecting from a breeding population a fiber producing plant of Group VII, which is not shared by the method of identifying an agent which alters fiber initiation and/or elongation of Group VIII, which is not shared by the transgenic fiber producing plant of Group IX.

4. Each of Inventions I-IX are capable of being separately made, independently used and the patentability of one does not render the others obvious or unpatentable.

Art Unit: 1638

5. Because these inventions are distinct for the reasons given above, have acquired a separate status in the art as shown by the literature and sequence searches required for each of the Inventions are not required for another of the Inventions, restriction for examination purposes as indicated is proper.

6. Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

7. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a petition under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(I).

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stuart F. Baum whose telephone number is 571-272-0792. The examiner can normally be reached on M-F 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anne Marie Grunberg can be reached on 571-272-0975. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1638

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 571-272-1600.

/Stuart F. Baum/  
Stuart F. Baum Ph.D.  
Primary Examiner  
Art Unit 1638  
December 19, 2009